

**UNCLASSIFIED**

Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION										DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY							R-1 ITEM NOMENCLATURE				
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7							Manned Reconnaissance Systems PE 0305207D				

<b>COST (IN MILLIONS)</b>	<b>FY 1998</b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>Cost to Complete</b>	<b>Total Cost</b>
<b>Total PE Cost</b>	26.402	*	*	*	*	*	*	*	*	*
<b>Project Name/No. and Subtotal Cost</b> <b>Manned Reconnaissance Systems U-2/P811</b>	26.402	*	*	*	*	*	*	*	*	*
<b>Quantity of RDT&amp;E Articles</b>										

\* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs: per the Program Decision Memorandum (PDM), the Manned Reconnaissance Systems funds for FY 00-05 were transferred to PE 0305207F and PE 0305207G.

**A. Mission Description and Budget Item Justification**

**Brief Description of Element:** Manned reconnaissance programs provide for a wide variety of reconnaissance tasks in support of the entire range of users from the tactical level to the national command authorities. Signals Intelligence, Imagery, Measurement and Signatures Intelligence, Target Acquisition, and Surveillance missions are performed by manned reconnaissance systems, across the spectrum of conflict. Manned reconnaissance systems also conduct missions in support of counter narcotics, disaster relief, mapping, charting and geodesy, scientific requirements, military and operations other than war. This element provides for manned reconnaissance platforms resident in the DARP. The activity ensures continued viability of both the platforms and the associated sensors as mission requirements and threats change. As DoD fosters greater commonality among systems, this element develops a means of compliance with the emerging architecture. This program is categorized as Budget Activity 7 because it provides for development of technologies and capabilities in support of Operational System Development.

<b>COST (IN MILLIONS)</b>	<b>FY 1998</b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>Cost to Complete</b>	<b>Total Cost</b>
---------------------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	----------------	-------------------------	-------------------

**UNCLASSIFIED**

**UNCLASSIFIED**

Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION											DATE February 1999	
APPROPRIATION/BUDGET ACTIVITY								R-1 ITEM NOMENCLATURE				
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7								Manned Reconnaissance Systems PE 0305207D				

<b>Total PE Cost</b>	26.402	*	*	*	*	*	*	*	*	*
<b>Total Project Cost/No.</b>										
<b>Subtotal Cost</b>										
<b>U-2/P811</b>	26.402	*	*	*	*	*	*	*	*	*
<b>Quantity of RDT&amp;E Articles</b>										

\* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Manned Reconnaissance Systems funds for FY 00-05 were transferred to PE 0305207F and PE 0305207G.

**A. Mission Description and Budget Item Justification**

**Brief Description of Element:** The U-2 Program provides unique capabilities to remotely collect and relay signals to Remote Operating Facility Airborne (ROFA), either directly via satellite or indirectly through ground satellite relay stations. This element provides RDT&E for the continued enhancement of capabilities to receive and exploit those signals. This program also funds the RDT&E portion of high payoff upgrades for the U-2 Advanced Synthetic Aperture Radar System (ASARS-2). ASARS-2 upgrades and modifications will extend the usable life of this critical sensor as well as enhance its area search, precision geolocation, and image quality characteristics sufficiently to support the targeting of precision guided munitions (PGMs). Several key Line Replaceable Units (LRUs) including the Process Control Unit (PCU), receiver - exciter, and waveform generator are approaching the end of their supportability life. Replacing the LRUs with next generation technology will make ASARS-2 supportable through the expected service life of the U-2 and provide capability enhancements necessary to support PGMs. This program is categorized as Budget Activity 7 because it provides for development of technologies and capabilities in support of Operational System Development.

Note: The ASARS-2 portion of the U-2 Program was previously justified in separate budget documents under the title "U-2 Support for Precision Guided Munitions".

**Program Accomplishments and Plans: (\$ in millions)**

**UNCLASSIFIED**

UNCLASSIFIED

Exhibit R-2, RDT&E BUDGET ITEM JUSTIFICATION		DATE February 1999
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE Manned Reconnaissance Systems PE 0305207D	
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7		

**FY 1998 Accomplishments: (\$26.402)**

- Upgrade airborne collection capabilities (\$3.689)
- ASARS 2 Radar hardware development (\$8.124)
- ASARS 2 Radar software development (\$8.989)
- ASARS 2 Integration & flight test (\$4.600)
- ASARS 2 Data Link (\$1.000)

**\* Per the FY 1999 Appropriations Act, the funds for FY 99 were transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Manned Reconnaissance Systems funds were transferred to PE 0305207F and PE 0305207G.**

**Acquisition Strategy:**

For airborne collection capabilities upgrades, modify existing platform and associated ground control equipment via Engineering Change Proposals (ECPs)/Task orders to existing USAF and NSA contracts. For defensive system capability add, select defensive system candidate from currently available systems, then evaluate and test on the U-2 aircraft. For ASARS-2, develop and test new technology line replaceable units (LRU's) for subsequent retrofit into the U-2's during normal U-2 Programmed Depot Maintenance (PDM), or during other ongoing U-2 modifications. LRUs for subsequent installation during PDM will be funded by the Air Force.

**B. Program Change Summary**

	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>
Previous President's Budget	26.6	*	*	*	*
Net Change	(.2)				
President's Budget Request	26.4	*	*	*	*

**\* Per the FY 1999 Appropriations Act, the funding for FY 99 was transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Manned Reconnaissance Systems funds were transferred to PE 0305207F and PE 0305207G.**

UNCLASSIFIED

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E BUDGET ITEM JUSTIFICATION</b>		<b>DATE</b> February 1999
<b>APPROPRIATION/BUDGET ACTIVITY</b>		<b>R-1 ITEM NOMENCLATURE</b>
<b>RDT&amp;E, DEFENSE-WIDE/BUDGET ACTIVITY 7</b>		Manned Reconnaissance Systems PE 0305207D

Change Summary Explanation:

Funding: The change in funding is a result of internal realignments within the DARP.

Schedule: N/A

Technical: N/A

**C. Other Program Funding Summary Cost**

	<u><b>FY 1998</b></u>	<u><b>FY 1999</b></u>	<u><b>FY 2000</b></u>	<u><b>FY 2001</b></u>	<u><b>FY 2002</b></u>	<u><b>FY 2003</b></u>	<u><b>FY 2004</b></u>	<u><b>FY 2005</b></u>	<b>To</b> <u><b>Complete</b></u>	<b>Total</b> <u><b>Cost</b></u>
U-2, Procurement, AF	162.047	*	*	*	*	*	*	*	Continuing	Continuing

\* Per the FY 1999 Appropriations Act, the funding for FY 99 was transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Manned Reconnaissance Systems funds were transferred to PE 0305207F and PE 0305207G.

**D. Schedule Profile**

Fiscal Year actual and planned events by quarter

	<u><b>FY 1998</b></u>				<u><b>FY 1999</b></u>				<u><b>FY 2000</b></u>				<u><b>FY 2001</b></u>			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Engineering Milestones N/A</b>																
See Note: SRR/SDR					X											
See Note: CDR						X										
<b>Test &amp; Evaluation Milestones N/A</b>																
See Note:						X										
<b>Contract Milestones</b>																
See Note: Award					X											

\* Per the Program Decision Memorandum (PDM), the Manned Reconnaissance Systems funds were transferred to PE 0305207F and PE 0305207G.

**UNCLASSIFIED**

**UNCLASSIFIED**

<b>Exhibit R-2, RDT&amp;E BUDGET ITEM JUSTIFICATION</b>		<b>DATE</b> <b>February 1999</b>
<b>APPROPRIATION/BUDGET ACTIVITY</b>  <b>RDTE, DEFENSE-WIDE/BUDGET ACTIVITY 7</b>	<b>R-1 ITEM NOMENCLATURE</b> <b>Manned Reconnaissance Systems</b> <b>PE 0305207D</b>	

Note: This line funds Quick Reaction Capability (QRC) Upgrades to the U-2 sensor to allow response to emergency, high priority threats. Project duration varies depending on complexity—between 9 and 21 months from definition through integration and test.

**UNCLASSIFIED**

UNCLASSIFIED

Exhibit R-3, RDT&E PROGRAM ELEMENT/PROJECT COST BREAK DOWN		DATE
APPROPRIATION/BUDGET ACTIVITY		September 1998
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7		R-1 ITEM NOMENCLATURE Manned Reconnaissance Systems PE 0305207D8Z/P811

UNCLASSIFIED

**UNCLASSIFIED**

Exhibit R-3 Cost Analysis (page 1)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT						PROJECT NAME AND NUMBER			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7			PE 0305207D8Z						Manned Reconnaissance Systems/P811			
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY Cost	1999 Cost*	1999 Award Date	2000 Cost *	2000 Award Date	2001 Cost *	2001 Award Date	Cost to Complete *	Total Cost *	Target Value of Contract
Product Development			26.402									
Licenses												
Tooling												
GFE												
Award Fees												
Subtotal Product Development			26.402									
Remarks												
Development Support												
Software Development												
Training Development												
Integrated Logistics Support												
Configuration Management												
Technical Data												
GFE												
Subtotal Support												
Remarks												

**Exhibit R-3, Project Cost Analysis**  
(Exhibit R-3, page 1 of 2)

**UNCLASSIFIED**

**UNCLASSIFIED**

Exhibit R-3 Cost Analysis (page 2)									DATE February 1999			
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT						PROJECT NAME AND NUMBER			
RDT&E, DEFENSE-WIDE/BUDGET ACTIVITY 7			PE 0305207D8Z						Manned Reconnaissance Systems/P811			
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY Cost	1999 Cost*	1999 Award Date	2000 Cost *	2000 Award Date	2001 Cost *	2001 Award Date	Cost to Complete *	Total Cost *	Target Value of Contract
Development Test & Evaluation												
Operational Test & Evaluation												
Tooling												
GFE												
Subtotal T&E												
Remarks												
Contractor Engineering Support												
Government Engineering Support												
Program Management Support												
Program Management Personnel												
Travel												
Labor (Research Personnel)												
Overhead												
Subtotal Management												
Remarks												
Total Cost			26.402									
Remarks												
* Per the FY 1999 Appropriations Act, the funding for FY 99 was transferred to the Services/Defense Agencies in various PEs; per the Program Decision Memorandum (PDM), the Manned Reconnaissance Systems funds for FY00-05 were transferred to PE 0305207F and PE 03050207G.												

(Exhibit R-3, page 2 of 2)

**UNCLASSIFIED**